	(Original Signature of Member)
	TH CONGRESS 1ST SESSION  H. R.
Т	o improve the visibility, accountability, and oversight of agency software asset management practices, and for other purposes.
	IN THE HOUSE OF REPRESENTATIVES
N	Ir. Cartwright introduced the following bill; which was referred to the Committee on
	A BILL
То	improve the visibility, accountability, and oversight of agency software asset management practices, and for other purposes.
1	Be it enacted by the Senate and House of Representa-
2	tives of the United States of America in Congress assembled,
3	SECTION 1. SHORT TITLE.
4	This Act may be cited as the "Strengthening Agency
5	Management and Oversight of Software Assets Act".
6	SEC. 2. DEFINITIONS.
7	In this Act:

1	(1) Administrator.—The term "Adminis-
2	trator" means the Administrator of General Serv-
3	ices.
4	(2) Agency.—The term "agency" has the
5	meaning given that term in section 3502 of title 44
6	United States Code.
7	(3) CLOUD COMPUTING.—The term "cloud
8	computing" has the meaning given the term in Spe-
9	cial Publication 800–145 of the National Institute of
10	Standards and Technology, or any successor docu-
11	ment.
12	(4) CLOUD SERVICE PROVIDER.—The term
13	"cloud service provider" means an entity offering
14	cloud computing products or services to agencies.
15	(5) Comprehensive assessment.—The term
16	"comprehensive assessment" means a comprehensive
17	assessment conducted pursuant to section 3(a).
18	(6) Director.—The term "Director" means
19	the Director of the Office of Management and Budg-
20	et.
21	(7) Plan.—The term "plan" means the plan
22	developed by a Chief Information Officer, or equiva-
23	lent official, pursuant to section 4(a).
24	(8) Software entitlement.—The term
25	"software entitlement" means any software that—

1	(A) has been purchased, leased, or licensed
2	by or billed to an agency under any contract or
3	other business arrangement; and
4	(B) is subject to use limitations.
5	(9) Software inventory.—The term "soft-
6	ware inventory' means the software inventory of an
7	agency required pursuant to—
8	(A) section 2(b)(2)(A) of the Making Elec-
9	tronic Government Accountable By Yielding
10	Tangible Efficiencies Act of 2016 (40 U.S.C.
11	11302 note; Public Law 114–210); or
12	(B) subsequent guidance issued by the Di-
13	rector pursuant to that Act.
14	SEC. 3. SOFTWARE ENTITLEMENT AND INVENTORY INTEG-
15	RITY.
16	(a) In General.—As soon as practicable, and not
17	later than 1 year after the date of enactment of this Act,
18	the Chief Information Officer of each agency, in consulta-
19	tion with the Chief Financial Officer, the Chief Procure-
20	ment Officer, and General Counsel of the agency, or the
21	equivalent officials of the agency, shall complete a com-
22	prehensive assessment of the software entitlements and
	as fterrors in representation of the among replicable about include
23	software inventories of the agency, which shall include—
<ul><li>23</li><li>24</li></ul>	(1) the current software inventory of the agen-

1	other agreements or arrangements of the agency,
2	and a list of the largest software entitlements of the
3	agency separated by vendor and category of soft-
4	ware;
5	(2) a comprehensive, detailed accounting of—
6	(A) any software deployed for the agency
7	as of the date of the comprehensive assessment,
8	including, to the extent identifiable, the con-
9	tracts and other agreements or arrangements
10	that the agency uses to acquire, deploy, or use
11	such software;
12	(B) information and data on software enti-
13	tlements, which shall include information on
14	any additional fees or costs for the use of cloud
15	services that is not included in the initial costs
16	of the contract, agreement, or arrangement—
17	(i) for which the agency pays;
18	(ii) that are not deployed or in use by
19	the agency; and
20	(iii) that are billed to the agency
21	under any contract or business arrange-
22	ment that creates redundancy in the de-
23	ployment or use by the agency; and
24	(C) the extent—

1	(i) to which any software paid for, in
2	use, or deployed throughout the agency is
3	interoperable; and
4	(ii) of the efforts of the agency to im-
5	prove interoperability of software assets
6	throughout the agency enterprise;
7	(3) a categorization of software licenses of the
8	agency by cost, volume, and type of software;
9	(4) a list of any provisions in the software li-
10	censes of the agency that may restrict how the soft-
11	ware can be deployed, accessed, or used, including
12	any such restrictions on desktop or server hardware
13	or through a cloud service provider; and
14	(5) an analysis addressing—
15	(A) the accuracy and completeness of the
16	software inventory and software entitlements of
17	the agency before and after the comprehensive
18	assessment;
19	(B) management by the agency of and
20	compliance by the agency with all contracts or
21	other agreements or arrangements that include
22	or implicate software licensing or software man-
23	agement within the agency;
24	(C) the extent to which the agency accu-
25	rately captures the total cost of enterprise li-

1	censes agreements and related costs, including
2	the total cost of upgrades over the life of a con-
3	tract, cloud usage cost per user, and any other
4	cost associated with the maintenance or serv-
5	icing of contracts; and
6	(D) compliance with software license man-
7	agement policies of the agency.
8	(b) Contract Support.—
9	(1) AUTHORITY.—The head of an agency may
10	enter into 1 or more contracts to support the re-
11	quirements of subsection (a).
12	(2) No conflict of interest.—Contracts
13	under paragraph (1) shall not include contractors
14	with organization conflicts of interest.
15	(3) OPERATIONAL INDEPENDENCE.—Over the
16	course of a comprehensive assessment, contractors
17	hired pursuant to paragraph (1) shall maintain oper-
18	ational independence from the integration, manage-
19	ment, and operations of the software inventory and
20	software entitlements of the agency.
21	(c) Submission.—On the date on which the Chief In-
22	formation Officer, Chief Financial Officer, Chief Procure-
23	ment Officer, and General Counsel of an agency, or the
24	equivalent officials of the agency, complete the comprehen-
25	sive assessment, and not later than 1 year after the date

1	of enactment of this Act, the Chief Information Officer
2	shall submit the comprehensive assessment to—
3	(1) the head of the agency;
4	(2) the Director;
5	(3) the Administrator;
6	(4) the Comptroller General of the United
7	States;
8	(5) the Committee on Homeland Security and
9	Governmental Affairs of the Senate; and
10	(6) the Committee on Oversight and Account-
11	ability of the House of Representatives.
12	(d) Consultation.—In order to ensure the utility
13	and standardization of the comprehensive assessment of
14	each agency, including to support the development of each
15	plan and the Government-wide strategy described in sec-
16	tion 5, the Director, in consultation with the Adminis-
17	trator, may share information, best practices, and rec-
18	ommendations relating to the activities performed in the
19	course of a comprehensive assessment of an agency.
20	SEC. 4. ENTERPRISE LICENSING POSITIONING AT AGEN-
21	CIES.
22	(a) In General.—The Chief Information Officer of
23	each agency, in consultation with the Chief Financial Offi-
24	cer and the Chief Procurement Officer of the agency, or

1	mation developed pursuant to the comprehensive assess-
2	ment of the agency to develop a plan for the agency—
3	(1) to consolidate software licenses of the agen-
4	cy; and
5	(2) to the greatest extent practicable, in order
6	to improve the performance of, and reduce unneces-
7	sary costs to, the agency, to adopt enterprise license
8	agreements across the agency, by type or category of
9	software.
10	(b) Plan Requirements.—The plan of an agency
11	shall—
12	(1) include a detailed strategy for—
13	(A) the remediation of any software asset
14	management deficiencies found during the com-
15	prehensive assessment of the agency;
16	(B) the ongoing maintenance of software
17	asset management upon the completion of the
18	remediation; and
19	(C) maximizing the effectiveness of soft-
20	ware deployed by the agency, including, to the
21	extent practicable, leveraging technologies
22	that—
23	(i) provide in-depth analysis of user
24	behaviors and collect user feedback:

1	(ii) measure actual software usage via
2	analytics that can identify inefficiencies to
3	assist in rationalizing software spending;
4	(iii) allow for segmentation of the user
5	base;
6	(iv) support effective governance and
7	compliance in the use of software; and
8	(v) support interoperable capabilities
9	between software;
10	(2) identify not fewer than 5 categories of soft-
11	ware the agency will prioritize for conversion to en-
12	terprise licenses as the software entitlements, con-
13	tracts, and other agreements or arrangements for
14	those categories come up for renewal or renegoti-
15	ation;
16	(3) provide an estimate of the costs to move to
17	enterprise, open-source, or other licenses that do not
18	restrict the use of software by the agency, and the
19	projected cost savings, efficiency measures, and im-
20	provements to agency performance throughout the
21	total software lifecycle;
22	(4) identify potential mitigations to minimize
23	software license restrictions on how such software
24	can be deployed, accessed, or used, including any
25	mitigations that would minimize any such restric-

1	tions on desktop or server hardware or through a
2	cloud service provider;
3	(5) ensure that the purchase by the agency of
4	any enterprise license or other software is based on
5	publicly available criteria that are not unduly struc-
6	tured to favor any specific vendor;
7	(6) include any estimates for additional re-
8	sources, services, or support the agency may need to
9	execute the enterprise licensing position plan;
10	(7) provide information on the prevalence of
11	software products in use across multiple software
12	categories; and
13	(8) include any additional information, data, or
14	analysis determined necessary by the Chief Informa-
15	tion Officer, or other equivalent official, of the agen-
16	cy.
17	(c) Consultation and Coordination.—The Di-
18	rector, in coordination with the Chief Information Officers
19	Council, the Chief Acquisition Officers Council, the Ad-
20	ministrator, and other government and industry represent-
21	atives identified by the Director, may establish processes
22	to identify, define, and harmonize common definitions,
23	terms and conditions, and other information and criteria
24	to support agency heads in developing and implementing
25	the plans required by this section.

1	(d) Support.—The Chief Information Officer, or
2	other equivalent official, of an agency may request support
3	from the Director and the Administrator for any analysis
4	or developmental needs to create the plan of the agency.
5	(e) Submission.—Not later than 120 days after the
6	date on which the Chief Information Officer, or other
7	equivalent official, of an agency submits the comprehen-
8	sive assessment pursuant to section 3(c), the head of the
9	agency shall submit to the Director, the Committee on
10	Homeland Security and Governmental Affairs of the Sen-
11	ate, and the Committee on Oversight and Accountability
12	of the House of Representatives the plan of the agency.
13	SEC. 5. GOVERNMENT-WIDE STRATEGY.
14	(a) In General.—Not later than 2 years after the
15	date of enactment of this Act, the Director, in consultation
16	with the Administrator and the Federal Chief Information
17	Officers Council, shall submit to the Committee on Home-
18	land Security and Governmental Affairs of the Senate and
19	the Committee on Oversight and Accountability of the
20	House of Representatives a strategy that includes—
21	(1) proposals to support the adoption of Gov-
22	ernment-wide enterprise licenses for software entitle-
23	ments identified through the comprehensive assess-
24	
	ments and plans, including, where appropriate, a

1	(2) opportunities to leverage Government pro-
2	curement policies and practices to increase inter-
3	operability of software entitlements acquired and de-
4	ployed to reduce costs and improve performance;
5	(3) the incorporation of data on spending by
6	agencies on, the performance of, and management
7	by agencies of software entitlements as part of the
8	information required under section 11302(c)(3)(B)
9	of title 40, United States Code;
10	(4) where applicable, directions to agencies to
11	examine options and relevant criteria for
12	transitioning to open-source software; and
13	(5) any other information or data collected or
14	analyzed by the Director.
15	(b) Budget Submission.—
16	(1) First budget.—With respect to the first
17	budget of the President submitted under section
18	1105(a) of title 31, United States Code, on or after
19	the date that is 2 years after the date of enactment
20	of this Act, the Director shall ensure that the strat-
21	egy required under subsection (a) of this section and
22	the plan of each agency are included in the budget
23	justification materials of each agency submitted in
24	conjunction with that budget.

1	(2) Subsequent 5 budgets.—With respect to
2	the first 5 budgets of the President submitted under
3	section 1105(a) of title 31, United States Code,
4	after the budget described in paragraph (1), the Di-
5	rector shall—
6	(A) designate performance metrics for
7	agencies for common software licensing, man-
8	agement, and cost criteria; and
9	(B) ensure that the progress of each agen-
10	cy toward the performance metrics is included
11	in the budget justification materials of the
12	agency submitted in conjunction with that
13	budget.
14	SEC. 6. GAO REPORT.
15	Not later than 3 years after the date of enactment
16	of this Act, the Comptroller General of the United States
17	shall submit to the Committee on Homeland Security and
18	Governmental Affairs of the Senate and the Committee
19	on Oversight and Accountability of the House of Rep-
20	resentatives a report on Government-wide trends, com-
21	parisons among agencies, and other analyses of plans and
22	the strategy required under section 5(a) by the Comp-
23	troller General of the United States.